## Interactive comment on "Status of organochlorine pesticides in the drinking water well-field located in the Delhi region of the flood plains of river Yamuna" by P. K. Mutiyar et al.

## **Anonymous Referee #1**

Received and published: 25 September 2011

The manuscript describes the occurrence of organochlorine pesticides in the well-field in the Delhi region. The authors compared the concentrations of pesticides in two different types of wells, Ranney wells and borewells during pre-monsoon and post-monsoon periods. This research contributes the information of occurrence of oganochlorine pesticide in the Delhi region. Table 9 and related description in results and discussion part is interesting relating to the source of HCH, when DDT used and redox conditions in the area. There are some points to be improved. Please consider the comments below:

Major Points:

1) Authors can provide the relation between the amount of use and the concentration

C23

of the investigated pesticides.

- 2) Relating to the description in page 93 line 1-9 and page 95 line 13-19, the authors suggest the reason of higher concentration of the pesticides in Ranney region. please combine the description in one paragraph with specific information. Is there effect of different depth between borewell and Ranney well on the concentration of the pesticides?
- 3) Authors described the Ranney wells are shallower than borewells. Please provide the depth of Ranney and borewell to interpret the importance of depth.
- 4) Regarding Table 4 and related description in results and discussion (page 91-92), provide the range of values with the average value in Table 4.
- 5) Page 95, line 22-23, please indicate that there was no difference in 'total pesticide concentration'. But this is somewhat confusing the effect of recharge of the aquifer during monsoon.

Minor Points: 1) Page 92, line 19. 'Tables 4 and 5 show levels of OCPs detected' should be Tables 5 and 6.

- 2) Page 92, line 20. TW-7 should be TW-6.
- 3) Please check the MDL unit in Table 2.
- 4) Please show the location of 21 bore-wells and 5 Ranney wells. It is confusing because more than 26 points are shown in Fig 1. In connection with this, in page 92, line 14-15, it is difficult to find the location of well (TW-1 to TW-21 and RW-1 to RW-5) in Fig 1.
- 5) In the extraction of pesticides residues part, what kind of prefilter was used?
- 6) Use BW and RW in Table 4 in full name.
- 7) Check the sentence page 96, line 1-2.

8) Please mention that the graphs indicate the total pesticides concentration in Fig 6 and Fig 7  $\,$ 

\_\_\_\_\_\_

Interactive comment on Drink. Water Eng. Sci. Discuss., 4, 85, 2011.